teur radiology" and take the responsibility. Let us develop at least an "amateur interest" in clinical medicine.

Do not throw a patient out of your office because he comes to you directly without a written request for a "flat plate" of this or that. Advise him and refer him to the one among your medical and surgical confrères whom you consider the most competent to handle his case, and do not ask the doctor to limit himself to percussion or auscultation only in making his examination. It is more blessed to give than to be continually receiving, and you will be more respected.

Do not be a "hedger,"—God Almighty hates one; express an opinion, make a suggestion. Your consultant wants someone who will share responsibility with him, not shirk it.

IN CONCLUSION

The targets are numerous, but the quiver grows empty. Let us speed one last arrow on its way—its name, "In Unitate Robur" ("In union there is strength"). Remember the fable of Æsop about the father of seven sons who, by their constant dissension seriously impaired the standing and fortune of the family? The father one day called them together and requested each one in turn to break a bundle of seven rods. Not one of the brothers could muster enough strength to accomplish the feat. Then the father untied the cord that bound the rods together and easily broke each individual rod. The continuance of the Section on Radiology is more important to its members than they think. Let everyone help.

Have I struck my target?

411 Thirtieth Street.

THE MANAGEMENT OF ALCOHOLISM*

By HARRY H. WILSON, M.D.
Los Angeles

DISCUSSION *by John B. Doyle, M.D., Los Angeles; H. Douglas Eaton, M.D., Los Angeles; Aaron J. Rosanoff, M.D., Los Angeles.*

A BETTER understanding of the biochemical, sociological, and psychological factors involved in alcoholism is desirable, and is the incentive for this paper.

For the past several years there seems to be an increase in the frequency of medical contact with those who constantly use alcohol to such an extent that it interferes with their business, marital, or social life, or with those who are periodically so addicted as to present a grave problem.

The medical profession must not assume an acquiescent attitude; we are concerned with the responsibility of not only rendering skillful scientific assistance in meeting the problem of the individual, but of properly evaluating the injurious effects of the excessive use or abuse of alcohol upon the community welfare. The medical profession, in times past, apparently has been negligent in meeting its responsibility by the lack of an attitude toward the overuse of tobacco and understanding the importance of certain occupational diseases, with the result that non-medical workers have led the way in finding solutions of these problems. Are we to do the same with alcoholism?

In the past most physicians have been compelled to resort to the use of sedatives or the depressive type of treatment, which consists in the use of apomorphin, bromids, chloral hydrate, morphin, phenobarbital, etc., and the forcing of alcohol upon the patient's consciousness with the idea of producing nausea and an abhorrence that makes the thought of alcohol intolerable. These procedures have, however, only a temporary restraining influence. Physiotherapy, consisting largely of hydrotherapy, with the idea of washing out the patient and literally pummeling him into nonresistance, has a similar temporary value.

THEORETICAL CONSIDERATIONS

It is most important to determine what is and why is an alcoholic. In the years past it was held, and some still hold to the theory, that a chemical affinity develops between the cells of the body and alcohol, and that a cell hunger exists which only can be satisfied by the administration of alcohol; that this chemical hunger supersedes will power and all other factors involved. However, most contributors to the literature of today express the thought that alcohol is only a substitute used in the seeking of relief by a maladjusted personality, and each author presents his interpretation and classification of the various types of broken personalities. Most of us are familiar with the classifications of Freud, Adler, Jung, Du Bois, Ellis, Hart, Cowels, Watson, etc.

PRINCIPLES IN THIS DISCUSSION

From the standpoint of the internist or the family physician, it seems inadvisable in this paper to discuss in detail the various theories concerning broken or maladjusted personalities, but to confine the discussion to a few generally accepted principles:

1. We may assume that the type of individual who misuses and abuses alcohol will find a substitute if alcohol is unobtainable, for the energy of his mental complexes is bound to find an outlet.
2. Alcohol is usually an expression of a weak or unstable nervous system, rather than the sole cause of it.
3. The maladjusted individual will not reach adjustment by or without the use of alcohol, but rather will be harmed by its effects.

THE CLASSIFICATION USED BY THE AUTHOR

In approaching the individual problems, the author has started with the premise that "Life is a series of conflicts between personality and changing circumstances."

Now, what is personality?

It is the accumulative experience derived from tribal, racial, national, religious, familial, adolescent and personal heritage and relationships, with a result as if all these factors formed a mold or an iron helmet into which the ego was poured,

* Read before the General Medicine Section of the California Medical Association, at the sixty-fifth annual session, Coronado, May 25 to 28, 1936.

each impression leaving an indelible mark to shape the personality or ego of the individual.

RESULTS OF THE CONFLICT BETWEEN PERSONALITY AND CHANGING CIRCUMSTANCES

1. The normal is exemplified by one who recognizes values and understands that it is relatively unimportant what happens to him, but that it is very important how he behaves toward what happens to him. In other words, the importance of attitude and behavior is understood; the ability to properly evaluate maintains throughout life.

2. The Attempted Adjustment or Maladjusted Group. This group consists of those who fail in the conflict to maintain a sense of values; and the first subdivision and the largest in number consists of

(a) *The Neurotic.* We are all familiar with the frequency with which symptoms are substituted for failure; this individual, as a defense mechanism, to excuse his or her failures or frustrations, uses illness which permits the justification of ego, and therefore substitutes symptoms for understanding.

(b) *The Genius or Work Substitute Adjustment Group.* This group, much smaller in number, consists of those fortunates who have literally thrown their nervous energy into a selected field of endeavor, with the result that they have so occupied their nervous energy as to permit it to act as a narcotic to obscure the importance of the sense of failure which brought about the maladjustment originally.

(c) *The Religious Zealot.* Here we have a substitution of faith for thinking. Here the inability to evaluate on the basis of logic permits the placing of an all-abiding confidence in a Greater Force as a reason for all of the apparent injustices of life, which are being worked out, and eventually reparation will be made by this Great Unseen Force. It is fortunate indeed for mankind that faith exists.

(d) *Drug Addicts.* The use of narcosis to inflate the ego or depress the veneer of culture and civilization is so well known and so closely allied to alcoholism as to permit its being considered in the same classification as (*e*) the liquor addict.

(e) *Alcohol Weaklings or Addicts.* The susceptibility of man to alcohol is variable. In its mild usage it may appear to be a blessing. Bernard Shaw states "that the common lot of the workingman in England is so hard, with his lack of education, lack of cultural development, too early marriage, too many children, inadequate income, long working hours, supervised by a dominant boss, going home where a shrew of a wife berates him for his inability to provide things that the more fortunate Mrs. Jones has, leaves a man with his ego so deflated that he finds solace in drink for a few hours in which he thinks himself a king."

This illustration seems to be nearly the only justification for the use of alcohol. The higher degrees of intoxication which permit the maladjusted personality to try to crawl into the neck of a bottle to hide from his problems in narcosis is the usual problem which confronts the family doctor.

(f) *Psychosis Group.* The last group in my classification of broken or attempted adjustments consists in the suicides, criminals, and the more or less completely broken personalities, many of whom are classified as insane, some called dementia praecox, others the depressive types of melancholia, etc. A considerable number of these may be corrected by proper understanding.

INVESTIGATIONS ON ABSORPTION OF ALCOHOL

Turner, Bogen, and others have proved:

1. That the rate of absorption of alcohol in the various tissues is practically the same.

2. That the degree of absorption of alcohol in all tissue cells, chiefly the brain, liver and kidney, is almost identical.

3. That blood alcohol determinations evidence that alcohol is practically eliminated from the blood stream in twenty-four hours.

4. That the blood alcohol content is in direct proportion to the degree of intoxication.

In my own experience, based upon a chance observation that several patients recovering from the abuse of alcohol had many symptoms similar to those of hypoglycemia or hyperinsulinism, blood-sugar studies were made and in every instance there was a rather constant finding of approximately 60 to 70 milligrams of sugar to 100 cubic centimeters of blood. It is a well-known fact that hypoglycemia follows poisoning by such drugs as carbon tetrachlorid, chloroform, guanidin, etc., by retarding glycogenesis in the liver, and that the liver has the bulk of work in handling alcohol; that overloading of the liver by alcohol retards glycogenesis; that at the same time the constant or excessive use of alcohol produces an excessive insulin secretion. It is readily understood, then, that the after-effects of alcoholism may be largely attributable to the overloading of the liver, the overactivity of the pancreas and their failure to assist in taking care of the alcohol, resulting in the production of nausea, tremor, vasodilatation, excessive perspiration, mental depression, etc.

It was the result of these observations which caused me to refrain from the commonly used depressive type of "knocking out" a patient by sedatives, and to substitute a supportive type of treatment.

TREATMENT OR MANAGEMENT

The treatment is divided into two definite phases: first, the biochemical; second, the psychologic. Naturally, they overlap.

An injection of colloidal calcium and dextrose is given two to four times daily for approximately three days, for the purpose of obtaining an improvement in glycogenesis, combating hypoglycemia, with the prevention of the accumulation of lactic acid in the tissues. It also relieves the headache, markedly controls tremor, and (where tests have been made) the blood-sugar level rises. In addition, general hygiene measures are instituted together with specific therapy, dependent upon the findings arrived at as the result of a careful history and physical examination.

This procedure accomplishes several things:

First: The patient must report to the physician two or three times each twenty-four hours, and in a condition of sobriety.

Second: A definite program has been instituted in which the patient's confidence must be obtained.

Third: It permits of the opportunity for closer acquaintanceship, with the gradual working out of the reasons for maladjustment under conditions which allow the patient to freely give his confidence to the physician.

Fourth: Each patient has obtained tremendous physical support with great alleviation of the symptoms of the "hangover," and the calcium and dextrose appear to take away the overwhelming desire for another drink, which so frequently obtains in the confirmed alcoholic. After a few days, when the patient is feeling physically well and mentally better, and does not hold such a morbid viewpoint concerning himself, and is beginning to look to his physician with a sense of respect and confidence, a careful presentation of the psychologic factors of maladjustment is made.

This, of course, is the most important part of the management of alcoholism, and success or failure is dependent upon the understanding of the physician and his ability to express himself clearly, simply, and in a manner comprehensible to the individual being dealt with. I wish to stress the importance of not overestimating the patient's intelligence or knowledge, and the need for avoiding confusing terminology, and the necessity of confining the discussion to factors that pertain to the patient's life, which have been brought out in the preliminary discussions and may be easily recognized by the patient. This whole approach is an attempt on the part of the physician to supply an abbreviated psychoanalytical study, and its importance cannot be overstressed.

FACTORS TO BE CONSIDERED IN DIAGNOSIS

In my own contacts I have attempted to arrive at a tentative diagnosis as a result of the observations made during the preliminary supportive phase of the treatment, stressing three factors:

1. Is the degree of alcoholism such as to leave the will still predominant?
2. Has it reached a stage where it has affected the veneer of culture or civilization?
3. Is the degree of alcoholism an expression of a hereditary degenerative type?

I am frank to confess that I have felt competent to approach only the first two phases, and that the limits of my understanding of the psychologic factors have prohibited me from attempting to deal with the most severe stage of maladjustment.

One other determining factor is: Does the patient have an incentive or anchor that gives him something to work with? I mean by this the need or desire to support a family that he loves, an abiding faith, etc. For without an incentive on the part of the patient there is little desire on the part of the physician, because the effort involved in working out these problems is great, and the time consumed must be considered, for most of us dislike wasting time and energy where the promise of results seem so slight.

I use graphic illustrations to explain to the patient how he acquired the maladjustment in his personality, and how it was caused by his failure to adjust to changing circumstances; where alcohol entered into the picture as a substitute for understanding, and how one must substitute work, love, play, and faith, or reëstablish a sense of values which puts him back into the normal class to obtain permanence in the abstinence from liquor.

IN CONCLUSION

An analysis of some ninety-odd cases that form the basis for this paper indicates that the greatest success follows where the use of alcohol is occasioned by falling into the error of social drinking, with the failure of the individual to understand that he has become a victim of a common physiologic factor: the ease with which impulses make use of the association fibers, so that these individuals who fall into the habit of taking a drink under certain circumstances or conditions gradually drink excessively until it takes the place of reasoning, or they reach the stage where the pathologic effects of maladjustment have become relatively fixed. With these people who fall in the first degree of intoxication, the will is still predominant, the incentive or anchor present, and when an explanation is made and an understanding is arrived at, the cure is relatively simple and assured.

The second degree of intoxication offers more difficulties, because the individual has become pathologic, is a liar, completely untrustworthy, cheats and steals even from himself, has lost incentive and self-respect. Success in this field follows only where strong supportive factors are present.

The third stage, in my mind, is almost entirely the problem of the psychiatrist or neurologist, and requires institutional care, the hope of rehabilitation being slight.

1919 Wilshire Boulevard.

DISCUSSION

JOHN B. DOYLE, M. D. (1930 Wilshire Boulevard, Los Angeles).—Doctor Wilson's observations concerning the resemblance of the more severe symptoms of alcoholism, and those of hypoglycemia or hyperinsulinism, are very interesting. For many years I have felt that some of the more profound disturbances, such as delirium, were due to quantitative and qualitative starvation. Accordingly, I have prescribed hot milk and cream, liberally seasoned with powdered capsicum, and fruit juices on alternate hours. More recently a concentrate of vitamin B has also been employed. When sedation has been required, paraldehyd has usually proved adequate. Spinal puncture is indicated when agitation is more marked than usual.

The problem of alcoholism is the problem of addiction in general. It is only the cultural characteristics of nations which determine that opium and its derivatives shall be the dominant addiction of the Orient, and alcohol of the Western World. While it is probably true that only individuals possessing a certain innate peculiarity become addicted to depressants, with the effects of which they are acquainted, it seems certain from clinical experience that, until the span of life is complete, predictions as to the presence or absence of this quality cannot safely be made.

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H. DOUGLAS EATON, M. D. (1136 West Sixth Street, Los Angeles).—Alcoholism is a problem with which all physicians, whatever their specialty may be, are brought into contact. The existence and growth of quasi scientific and commercialized, so-called "cures," demonstrate both

the difficulty of the problem and the inadequacy of scientific medicine in meeting it. Those of us who, through a lack of interest or knowledge, do not wish to handle the therapy of alcoholism ourselves should at least be prepared to advise in general terms and to steer the alcoholic into competent medical hands.

Doctor Wilson's approach to the alcoholic problem is an interesting and stimulating one. Certainly any adequate therapy of alcoholic addiction must take into consideration the personality of the addict, as well as the chemical and pathologic changes that are present in varying degrees. Treatment aimed at the elimination of the last-named factors rightly initiates our handling of the individual case. Doctor Wilson's suggestions along this line merit further observation and study in a larger series of cases.

The subject of individual maladjustments and personality disorders is too broad to be covered in the present discussion. We can agree with Doctor Wilson that success in the handling of such cases depends on an adequate analysis of the individual case, followed by reëducation, both mental and physical. Such treatment offers the best, indeed the only, chance of permanent cure, and undoubtedly succeeds in a percentage of the milder cases of alcoholism.

The truly pathologic type of alcoholism eventually falls into the hands of the neuropsychiatrist and is, in my experience, one of the most difficult problems he is called upon to meet. Here one is confronted not only with lack of coöperation on the part of patients—a large majority of whom consult us, not because of their own desires, but because relatives or friends insist upon it—but frequently with actual inadequacies in constitutional make-up and definite psychoses. In another group, despite a potentially normal make-up, the chemical and pathologic changes mentioned by Doctor Wilson have become irreversible rather than reversible. In such cases a controlled environment, often for a considerable period of time, is requisite for successful treatment.

Doctor Wilson has outlined a viewpoint and method of approach to the problem of alcoholism which should prove of definite value to every internist dealing with these cases.

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Aaron J. Rosanoff, M. D. (1908 Wilshire Boulevard, Los Angeles).—A rather pessimistic note is to be detected in Doctor Wilson's paper, especially with reference to the more severe types of cases of chronic alcoholism. In my opinion this is justified by many discouraging experiences.

Millions of people drink, yet only thousands become chronic alcoholics. It is obvious that the nature of the soil is an important factor in etiology. To what extent this is inborn and to what extent this originates in social environment is a question that no one could answer fully, but undoubtedly both inborn and environmental factors combine to produce the phenomenon of chronic alcoholism in a small percentage of individuals.

I have had an opportunity of discussing with Doctor Wilson the special plan of treatment which he has outlined in this paper. I have had no personal experience with it; but I have witnessed the trial of this treatment in three cases which I had had under my care. The results were unsatisfactory, both while under my care and while under the treatment described by Doctor Wilson.

In an experience extending over a third of a century with more than two thousand cases of chronic alcoholism, I, too, have come to be pessimistic about the prognosis. I believe there is no such thing as a cure for chronic alcoholism. It is true that about 10 or 15 per cent of the cases do recover, but such recovery in my experience is to be attributed not so much to the method of management as to a more than usually favorable soil in the temperamental make-up of the individual.

As alcoholism continues it invariably leads to further deterioration of temperament and character, and thus a vicious circle is established until a point is reached eventually when the prognosis becomes quite hopeless. In other words, something might be accomplished in a limited percentage of cases of recent origin, but hardly anything in cases of old standing.

Recently I had an occasion to review a Russian contribution on the subject of alcoholism (*American Journal of Psychiatry*, 92:992, January, 1936). Under the special conditions which now prevail in the Soviet Union, real success on a large scale has been attained in the management of alcoholism. Drunkenness, acute and chronic, has always been a vast problem in the Russian Empire. I doubt if anything of practical value is to be gained here from a study of the management of this situation as it is organized in the Soviet Union today; their methods could not be applied in this country.

THE LURE OF MEDICAL HISTORY†

CALIFORNIA'S FIRST MEDICAL SURVEY: REPORT OF SURGEON-GENERAL JOSÉ BENITES*

A TRANSLATION‡

By Sherburne F. Cook, Ph.D.
Berkeley

IN 1804, the surgeon-general at Monterey, José Benites, was called upon by the Viceroy to make a report on the state of health of the whites and Indians in the California settlements. This report, or "Informe," forwarded under the date of January 1, 1805, has been frequently mentioned by persons writing on California medical history, and small portions were translated by Father Zephyrin Engelhardt.[1]

However, the complete document has never been translated, nor have the comments and criticisms of the royal director of the treasury and the Royal Medical Board ever received attention. These, in themselves, throw valuable sidelights upon the status of the medical profession and public health in the early nineteenth century. All three documents are to be found as copies in the Santa Barbara Archives, Vol. 3, pp. 4-12, as they are at present bound in the Bancroft Library, Berkeley.

†A Twenty-Five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of California and Western Medicine. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

* From the Division of Physiology, University of California Medical School, Berkeley.

‡ Editor's Note.—Where and how the author found this interesting original report is stated in the following letter:

To the Editor:—Not long ago, while looking over the Santa Barbara archives, I came upon the original Benites report of 1805, together with two other related documents. Since this was the first comprehensive report ever rendered by a physician concerning the state of health of the inhabitants of this State, and since it has never appeared as a whole in print, I have translated it, together with the comments of the Royal Treasurer and the Royal Medical Board of Mexico City. I may add that the report contains what, as far as I am aware, are the earliest case histories from the State as described by the attending physician.

Thinking that these documents might possibly be of interest to the medical profession of the State, I am forwarding translations herewith, submitting them for publication, if you think desirable, in California and Western Medicine.

Very truly yours,
S. F. COOK.

Division of Physiology,
University of California Medical School.

1 *Missions and Missionaries of California*, Vol. 2, p. 608. See also Cephas L. Bard: *A Contribution to the History of Medicine in Southern California* (Ventura, 1894), p. 18; George D. Lyman: *California Hist. Soc. Quarterly* (1925), Vol. 4, p. 150; and Henry Harris: *California's Medical Story* (San Francisco, 1932), p. 28.